chemical field. Therefore, the Examiner requests that the scope of the claim regarding the pigments be limited to the pigments specifically listed in the specification.

Moreover, the Examiner states that while the specification is enabling for one organic ionic group such as $C_6H_4CO_2$, $C_6H_4SO_3$, $C_{10}H_6CO_2$, $C_{10}H_6SO_3$, $C_2H_4SO_3$, etc., the specification does not reasonably provide enablement for all the organic ionic groups in the chemical field. Therefore, the Examiner requests that the scope of the claim regarding the organic ionic groups be limited to the organic ionic groups specifically listed in the specification.

Additionally, the Examiner asserts that while the specification is enabling as to one amphiphilic counterion group such as cationic amphiphilic ions and anionic amphiphilic ions, the specification does not reasonably provide enablement for all the amphiphilic counterion groups in the chemical field. Therefore, the Examiner requests that the scope of the claim regarding the amphiphilic counterion groups be limited to the amphiphilic counterion groups specifically listed in the specification. For the following reasons, the rejection under 35 U.S.C. §112, first paragraph, is respectfully traversed.

With respect to the term "pigment," the present application provides clear support for this term by way of general descriptions and specific examples. For instance, the examples provided at pages 13 and 14, enables a person having ordinary skill in the art to practice the full scope of the claimed invention. In view of the specific examples, the general classes of pigments provided in the specification, and the Examples, clearly, one skilled in the art can use any pigment to make a modified pigment product as set forth in the claims of the present application. The listed classes of pigments and the representative examples recited throughout the specification provide a sufficiently clear explanation of the invention so as to enable a person having ordinary skill in the art to make

and use the claimed invention without undue experimentation. The Examiner does not provide any technical reason or prior art to support the argument that the term "pigment" is not enabled by the present application. To the contrary, there are numerous patents in the pigment and ink and coating area which use the term pigment and provide the same types of examples as in the present specification. Accordingly, the technical skill held by one skilled in the art could easily produce a pigment having the groups set forth in the claims of the present application. Absent the Examiner providing concrete technical evidence to support a lack of enablement rejection, the present specification by way of specific examples and general teaching has provided sufficient enablement to one skilled in the art to make and use the entire scope of the claimed invention. Accordingly, this part of the rejection should be withdrawn.

With respect to the Examiner's argument that the scope of the claim regarding the organic ionic group be limited to the organic ionic groups specifically listed in the specification, the applicants respectfully disagree. Again, the Examiner has provided no technical reasons or prior art to support the argument that the present specification does not provide enablement to one skilled in the art. The burden is clearly on the Examiner to initially provide some foundation for this conclusion. Merely asserting that the present application should be limited to the specific, literally recited groups set forth in the specification is not sufficient grounds for an enablement rejection. The Examiner must put forward technical reasons why enablement is not satisfied in view of the skill possessed by one skilled in the art and in view of the technical disclosure provided by the present application. The present specification clearly provides a detailed listing of various organic groups that can be used as well as provides methods to attach organic groups onto a pigment. Furthermore, specific examples are provided showing the attachment of organic groups. For

instance, beginning at page 9, line 20 to page 10, line 18, the specification provides a sufficiently clear explanation of the organic chemicals to enable a person having ordinary skill in the art to make and use the invention without undue experimentation. Accordingly, one skilled in the art would clearly be able to attach a variety of organic ionic groups onto the pigment as set forth in the claims. Absent the Examiner providing clear technical support, and since the Examiner's statement is conclusory in nature, this part of the rejection should be withdrawn.

With respect to the Examiner's request that the scope of the claim regarding the amphiphilic counterion groups be limited to the amphiphilic counterion groups specifically listed in the specification, the applicants respectfully disagree. Again, the Examiner has provided no technical reasons or prior art to support the argument that the present specification does not provide enablement to one skilled in the art. The burden is clearly on the Examiner to initially provide some foundation for this conclusion. Merely asserting that the present application should be limited to the specific, literally recited groups set forth in the specification is not sufficient grounds for an enablement rejection. The Examiner must put forward technical reasons why enablement is not satisfied in view of the skill possessed by one skilled in the art and in view of the technical disclosure provided by the present application. The present specification clearly provides a detailed listing of various amphiphilic counterionic groups that can be used as well as provides methods to attach. Furthermore, specific examples are provided showing the attachment of these groups. Moreover, beginning at page 11, line 7 to page 13, line 10, the specification provides a sufficiently clear explanation of the amphiphilic counterion groups to enable a person having ordinary skill in the art to make and use the invention without undue experimentation. Accordingly, one skilled in the art would be clearly able to attach a variety of amphiphilic counterionic groups onto the pigment

as set forth in the claims. Absent the Examiner providing clear technical support, this rejection should be removed since the Examiner's statement is conclusory in nature.

In fact, the one patent relied upon by the Examiner, U.S. Patent No. 5,698,016 to Adams et al. specifically refers to and claims organic groups and amphiphilic ions. Clearly, these terms have been recognized in the past and the type of disclosure for these terms as set forth in Adams et al. is no different from the type of support provided in the present application. Clearly, the evidence shows that there is sufficient support and enablement in the present application. Accordingly, the rejection under 35 U.S.C. §112, first paragraph, should be withdrawn.

At pages 3 and 4 of the Office Action, the Examiner rejects claims 1-4, 6, 7, and 20-28 under 35 U.S.C. §102(b) as being anticipated by Adams et al. (U.S. Patent No. 5,698,016). The Examiner asserts that Adams et al. discloses a modified pigment, such as a carbon black, having attached at least one organic group and at least one amphiphilic counterion, which can have a charge that is opposite to that of the organic ionic group. Moreover, the Examiner asserts that the organic group attached to the carbon can be at least one aromatic group or C_1-C_{12} alkyl group. Thus, the Examiner concludes that the claimed invention is anticipated by Adams et al. For the following reasons, the rejection under 35 U.S.C. §102(b) is respectfully traversed.

In response to the previous Office Action, the applicants filed a response on August 15, 2002, which showed that the claimed invention is not anticipated by Adams et al. because Adams et al. does not include at least one steric group that is attached onto a pigment, and at least one organic ionic group and at least one amphiphilic counterion that are attached to the pigment. Thus, for this reason above, the rejection under 35 U.S.C. §102(b) in view of Adams et al. should be withdrawn.

To again properly respond to the Examiner's rejection of claims 1-4, 6, 7, and 20-28 under

35 U.S.C. §102(b) as being anticipated by Adams et al., the modified pigment of the claimed invention includes a pigment a) having attached at least one steric group, and b) having attached at least one organic ionic group and at least one amphiphilic counterion, wherein the amphiphilic counterion has a charge that is opposite to that of the organic ionic group. As discussed in the specification at page 5, with respect to at least one steric group, any group that has the ability to be steric or promote steric hindrance can be attached onto the pigment. Thus, the steric group includes both organic and inorganic groups that have the ability to be steric or are capable of promoting steric hindrance. The specification, at pages 5-8, and claims 2, 8, 9, and 20 show that the steric group of the claimed invention can include at least an arylene group or at least an alkylene group. It is important for the Examiner to appreciate that two different types of groups are attached to the pigment of the claimed invention. (See the claims and page 5, lines 11-24, for instance, of the patent application). First, there is at least one steric group that is attached onto a pigment, and second, there is at least one organic ionic group and at least one amphiphilic counterion that are attached to the pigment.

Adams et al. discloses only at least one organic group along with an amphiphilic ion attached to a carbon product. The amphiphilic ion of Adams et al. is not separately attached to the carbon product; it is associated with the organic group. Adams et al. does not teach or suggest separate steric groups and Adams et al. does not promote the steric hindrance that is associated with the steric group attached to the pigment of the claimed invention. As stated, Adams et al. only teaches the attachment of only one type of group, namely at least one organic group with an amphiphilic ion that has a charge that is opposite to the organic group. Thus, Adams et al. does not teach the additional steric group, which is also attached to a pigment as recited in the claims of the

present application. Accordingly, the rejection under 35 U.S.C. § 102(b) over Adams et al. should be withdrawn.

At page 5 of the Office Action, the Examiner rejects claims 29-31 under 35 U.S.C. §103 as being unpatentable over Adams et al. in view of Kato et al. (U.S. Patent No. 5,731,115). The Examiner asserts that Adams et al. discloses a carbon black with a polymeric cationic amphiphile. The Examiner acknowledges that Adams et al. differs from the present invention in that a print plate containing a substrate, a protective layer, an absorptive layer containing at least one modified pigment, and a method of imaging a lithographic print plate using a laser are not disclosed, along with subjecting the plate to a solvent for the removal of portions of the imaged layer. To overcome this deficiency, the Examiner asserts that Kato et al. discloses a preparation of a waterless lithographic printing plate by using a laser beam. The Examiner further asserts that Kato et al. discloses a photoconductive layer, which includes a substrate with a pre-coated layer and a charge generating agent including organic pigments, such as a carbon black. Furthermore, the Examiner asserts that in the wet process of Kato et al., the non-tacky resin layer is treated with a solvent to remove portions from the imaged layer.

The Examiner then concludes that if a person having an ordinary skill in the art had desired to improve the properties of the printing plate, such as the printability of the printing plate, it would have been obvious for the one skilled in the art to use the modified carbon black of Adams et al. with a polymeric cationic amphiphile in Kato et al.'s preparation of the waterless lithographic printing plate as an alternative to the ordinary carbon black, with an expectation of similar success as in the process of Kato et al. For the following reasons, the rejection under 35 U.S.C. §103 is respectfully traversed.

Again, it appears the Examiner has not addressed the arguments presented in applicant's response filed on August 15, 2002, with respect to Adams et al. in view of Kato et al. However, to again properly respond to the Examiner's rejection of claims 29-31 under 35 U.S.C. §103 over Adams et al. in view of Kato et al., claims 29-31 relate to printing plates or methods of imaging a lithographic printing plate. Claims 29 and 31 are directly or indirectly dependent on claim 1 in that the radiation absorptive layer is using the modified pigment of claim 1 of the present application. As mentioned above, Adams et al. does not teach or suggest the modified pigment of claim 1 and the claims dependent thereon. Also, Adams et al. does not teach or suggest the attachment of a steric group to the pigment. Kato et al. does not overcome these deficiencies. Thus, even if Adams et al. and Kato et al. were combined, the combination still would not teach or suggest the claimed invention since claims 29-31 are using the pigment of claim 1.

Further, Kato et al. relates to waterless lithographic printing plate and does not teach or suggest the use of a modified pigment and certainly not a pigment having attached at least one steric group and also an organic ionic group. Accordingly, the rejection under 35 U.S.C. §103 over Adams et al. in view of Kato et al. should be withdrawn.

At page 7 of the Office Action, the Examiner objects to claims 5 and 8-19 as being dependent upon on a rejected base claim. The Examiner asserts that claims 5 and 8-19 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The undersigned and the applicant appreciate the Examiner's indication of the patentability of claims 5 and 8-19. In view of the above comments, the remaining claims should also be allowable as well.

If there are any remaining questions, the Examiner is encouraged to contact the undersigned

by telephone.

CONCLUSION

In view of the foregoing remarks, the applicant respectfully requests the consideration of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 03-0060. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,

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